

## San Antonio Missions NHP - Pre-visit Activity #1 - Recommended

### **“But One little Touch Won’t Hurt!” times 55,000 kids = Damage**

Subject: Science, Citizenship  
Grade: Grade K-8  
Goal: To prevent students from touching mission structures when visiting San Antonio Mission NHP by showing that touching can cause damage.  
Time: Teacher preparation - 15 minutes the first week  
Class time - 30 minutes one or two weeks later  
Materials: Piece of white cotton material, two mirrors, tacks or staples, paper towels, glass cleaner, small amount of laundry detergent, water.

#### Background:

San Antonio Missions NHP is made up of many old structures. Like anything old, these structures are falling apart. One simple thing that visitors can do to prevent the acceleration of damage is not to touch.

A great deal of damage to surfaces is caused by people touching. Dirt on hands is a visible and, generally, understandable way to damage walls. Simply take a look at light switches. However, more damage is done by the natural oils on our skins, whether on fingers or sweaty backs. Oils can accelerate the accumulation of dirt on a surface. Oils can also eat into surfaces.

Not only are dirt and oil in and of themselves destructive, but the act of cleaning dirt and oil is destructive. When cleaning, not only is the dirt removed, but also a thin layer of the original material. Every time we have to clean a dirty structure, material made by the people who lived here over 250 years ago is rinsed down a drain!

Finally, people often do not simply touch a surface, but they actually rub the surface. Mortar between the stones is especially soft and is being rubbed away at an alarming rate.

Parks have found that when a person touches something, s/he does it for one of two reasons. The first is that it is an unconscious act. The wall is made of stone; it is natural to lean against a solid surface. The second reason is that a person is interested! When someone is involved, s/he wants to experience it with all his/her senses if possible – touch is natural. But due to the damage caused by simply touching, we must continually teach them NOT to do a sub-conscious action.

## Procedure:

1. Cut two pieces of white cotton material approximately 6-inch square. Wash them to remove the sizing. Fit one piece snugly over the classroom's light switch. Hang the second piece in a location nearby, but where this piece will not be easily touched. Leave the two pieces of material in place for one or two weeks. Try not to modify normal behavior in turning the lights on and off. Tell the class that they are collecting dirt.
2. At the same time bring two mirrors to class. Clean both mirrors very well. After cleaning one mirror, have each child put his/her thumbprint somewhere on it. Do **not** have them wash their hands immediately before this activity. Tell the class that they are collecting dirt. Place the two mirrors somewhere in the room where they will not be disturbed for one or two weeks. They need to be out in the open, not in a drawer.
3. At the end of the "test" period, remove the two pieces of material. Compare the two pieces. Possible questions: Why is one dirty? Do your hands look dirty? Do your hands have to be dirty to leave a mark?
4. Next look at the two mirrors, being careful not to touch the surfaces. Compare the two surfaces. Possible questions: How clearly can you see yourself? Is one dirtier than the other? Why?
5. Wash the piece of material which was on the light switch. Compare the two pieces. Is the one piece as clean as the other? Speculate as to what might happen to the one piece of material if it had to be washed every week, while the other one was cleaned once a year.
6. Using separate paper towels, carefully clean each mirror. Which paper towel shows more dirt? Why? Would there have been more or less dirt if hands had been washed before putting thumbprints on the mirror?
7. Discuss why No Touching is a park rule.

Extension: Expand the No Touching rule to other sites, such as museums, zoos, and nature areas. Discuss the similarities and differences between touching and graffiti.